

CLAIMS

What is claimed is:

1. A method of inputting text entry of a logographic based language, comprising:
 - displaying one or more candidate characters for a target character among the candidate characters;
 - tracking a user's eye gaze position;
 - based on the user's eye gaze, pre-selecting one or more candidate characters; and
 - selecting the target character from among the one or more pre-selected candidate characters by multiplexing the user's eye gaze position and a single confirmation input command.
2. The method of claim 1, further including activating the single confirmation input command by manually pressing a single confirmation key.
3. The method of claim 2, wherein the step of displaying one or more candidate characters includes displaying Chinese characters.
4. The method of claim 3, wherein the step of pre-selecting one or more candidate characters includes highlighting the pre-selected candidate characters.
5. The method of claim 3, wherein the step of pressing the single confirmation key includes pressing any one or more of: a space bar, a control key, an enter key, a dedicated key, a foot pedal, a mouse button, a pad tap.

6. The method of claim 3, wherein the step of activating the single confirmation input command includes entering a voice command.

7. The method of claim 3, wherein the step of displaying includes displaying the candidate characters in order of frequency of usage.

8. The method of claim 7, wherein the step of displaying includes displaying a most frequently used candidate character in a pre-selected position.

9. The method of claim 3, wherein the step of displaying includes displaying the candidate characters in a single row.

10. The method of claim 3, wherein the step of displaying includes displaying the candidate characters in a staggered arrangement.

11. A method of accelerating text entry of a logographic based language, comprising:

visually scanning displayed one or more candidate characters of the logographic based language for a target character among the candidate characters;

pre-selecting the one or more candidate characters until the target character is recognized;

identifying the target character based on visual recognition; and

selecting the target character that has been pre-selected by activating a single confirmation input command;

wherein multiplexing visual recognition and a single confirmation input command accelerates text entry.

12. The method of claim 11, wherein activating the single confirmation input command includes manually pressing a single confirmation key.

13. A system for accelerating text entry of a logographic based language, comprising:
a gaze tracking apparatus that monitors an eye gaze of a user;
a display for visually displaying one or more candidate characters of the logographic based language, and including:
an input tracking bar that displays inputted characters;
a gaze-tracking panel that displays the one or more candidate characters and that allows a pre-selection of the one or more candidate characters until a target character is identified; and
a character output area that displays target characters that have been selected; and
a user input device including a single confirmation input command, that enables the selection of the target character by visually recognizing the target character while activating the single confirmation input command;
wherein multiplexing visual recognition and the single confirmation input command accelerates text entry.

14. The system of claim 13, further including a scrolling indicator that enables scrolling action between multiple pages.

15. The system of claim 13, wherein the single confirmation input command includes a single manual confirmation key.

16. The system of claim 13, wherein the candidate characters include Chinese characters.

17. The system of claim 13, wherein the gaze tracking apparatus visually highlights pre-selected candidate characters.

18. The system of claim 15, wherein the single confirmation key includes any one or more of: a space bar, a control key, an enter key, a dedicated key, a foot pedal, a mouse button, a pad tap.

19. The system of claim 13, wherein the single confirmation input command includes a voice command.

20. The system of claim 13, wherein the display displays candidate characters in order of frequency of usage.

21. A computer program product for accelerating text entry of a logographic based language, comprising:

- a gaze tracking apparatus that monitors an eye gaze of a user;

- a display for visually displaying one or more candidate characters of the logographic based language, and including:

 - an input tracking bar that displays inputted characters;

 - a gaze-tracking panel that displays the one or more candidate characters and that allows a pre-selection of the one or more candidate characters until a target character is identified; and

 - a character output area that displays target characters that have been selected; and

- a user input device including a single confirmation input command that enables the selection of the target character;

- wherein multiplexing visual recognition and the single confirmation input command accelerates text entry.

22. A method of inputting text entry of a logographic based language, comprising:
graphically presenting multiple candidates of characters on a computer screen according to a user's input stream;
tracking the user's eye gaze;
monitoring a single confirmation signal;
selecting a target from the multiple candidates according to the user's eye-gaze location in a time window within which the confirmation signal is activated.

23. The method of claim 22, wherein the user's input stream are Chinese Pinyin characters.

24. The method of claim 22, wherein the single confirmation signal is activated by pressing a single predefined key.